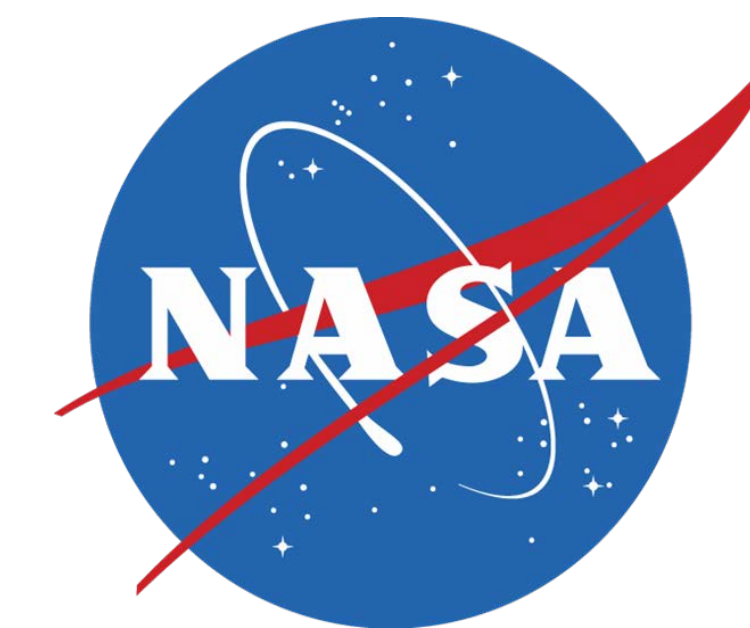
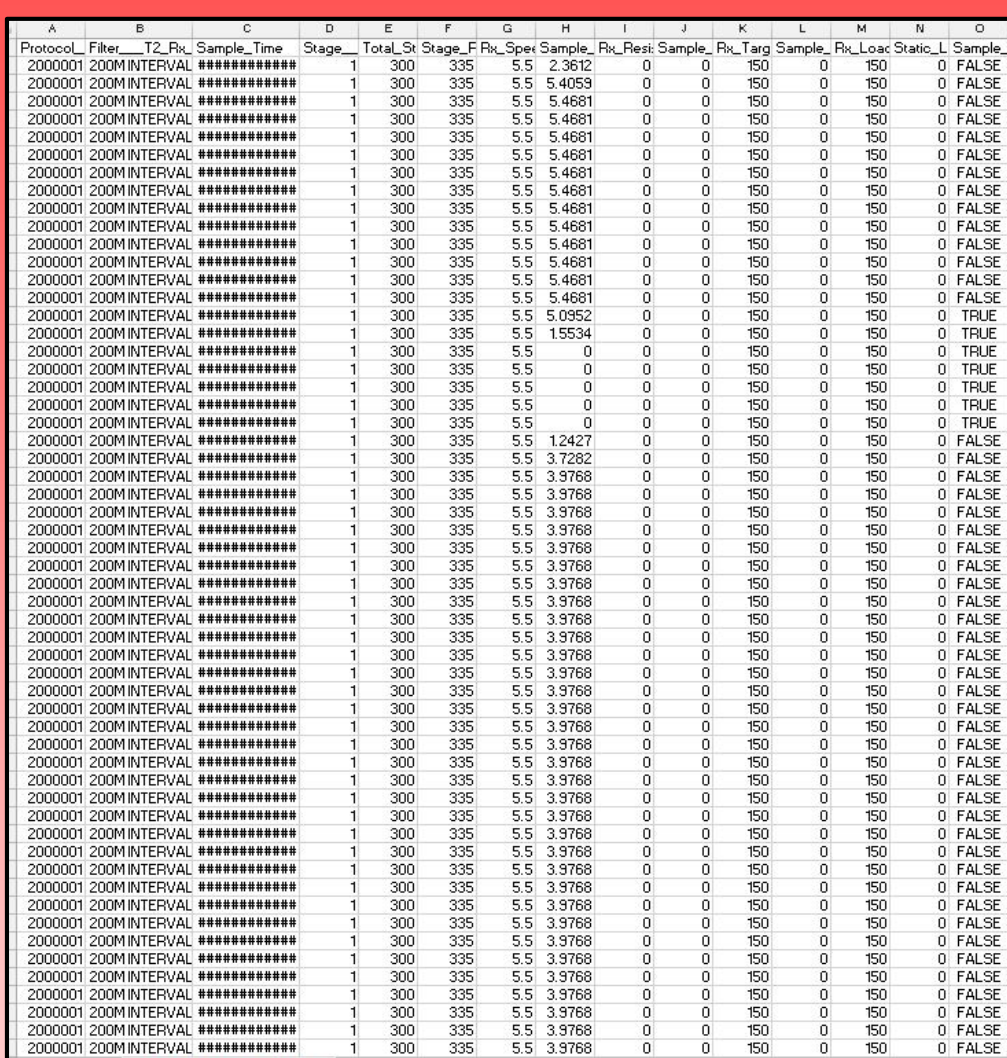


³NASA Johnson Space Center, Houston, Texas.

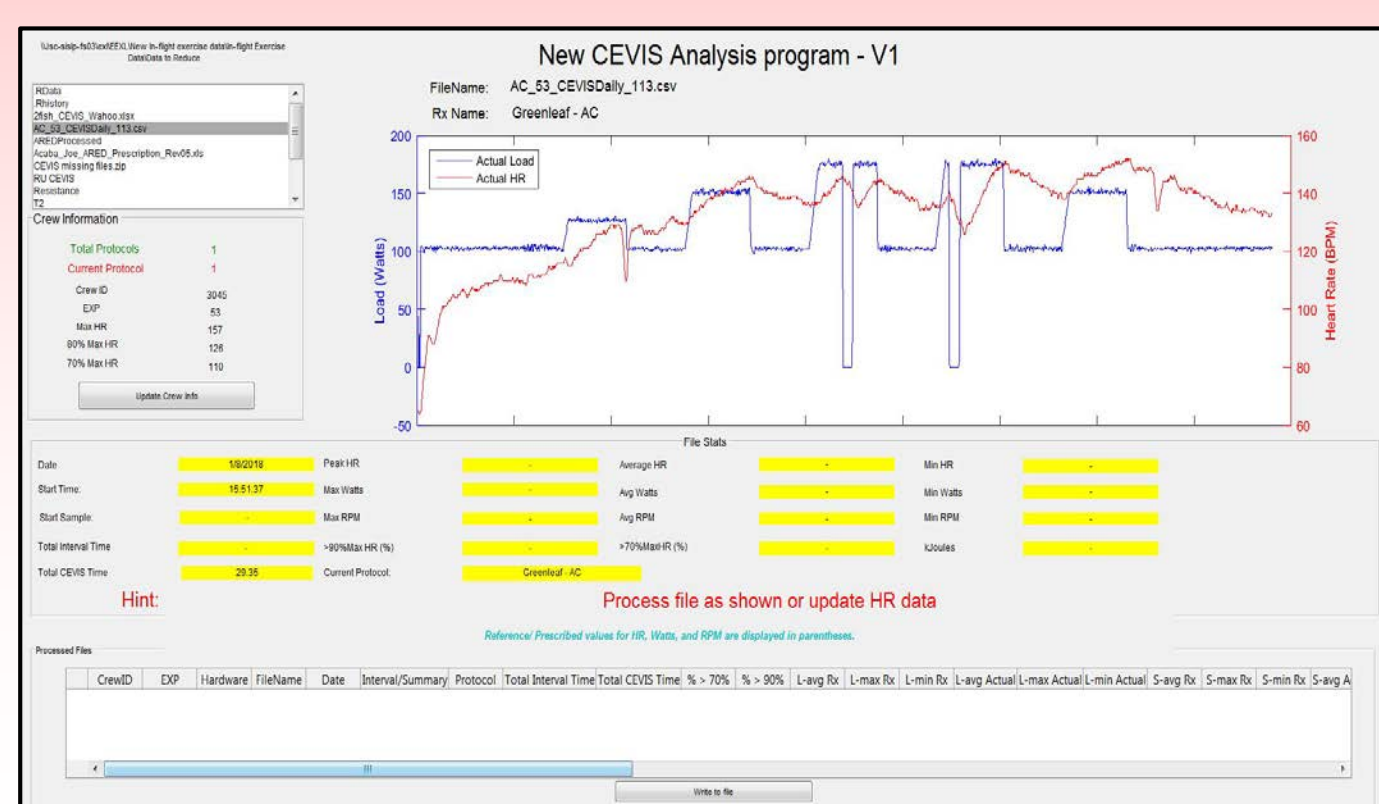


Raw Data Repository

Provides “reporting” services



Data Management System



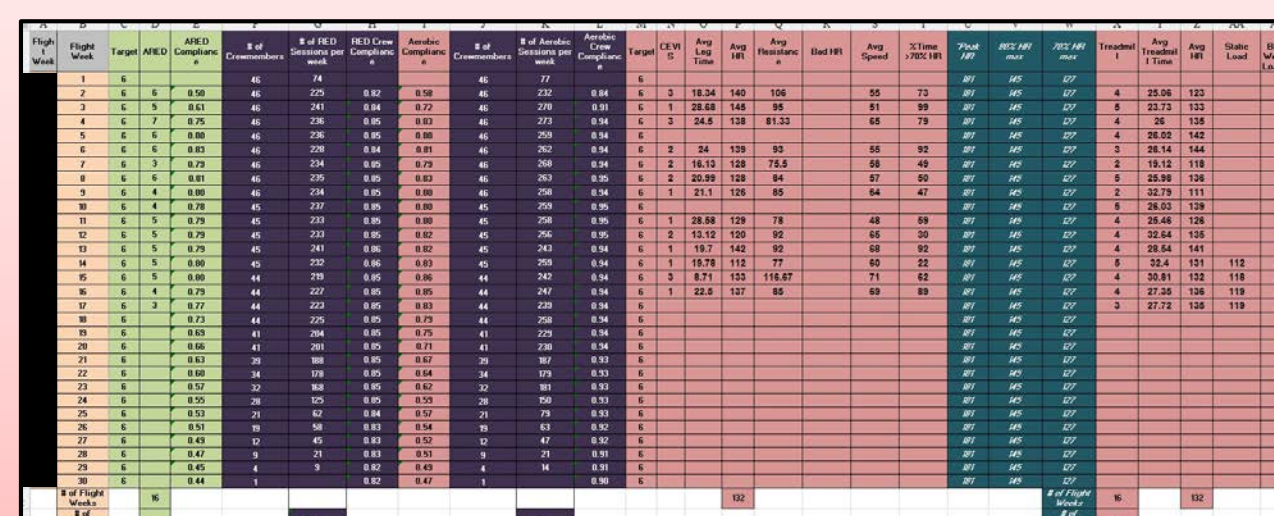
- Requires user license & maintenance license
- Must be updated with every DMS output update
- Limits analysts to those who have MATLAB

3 min



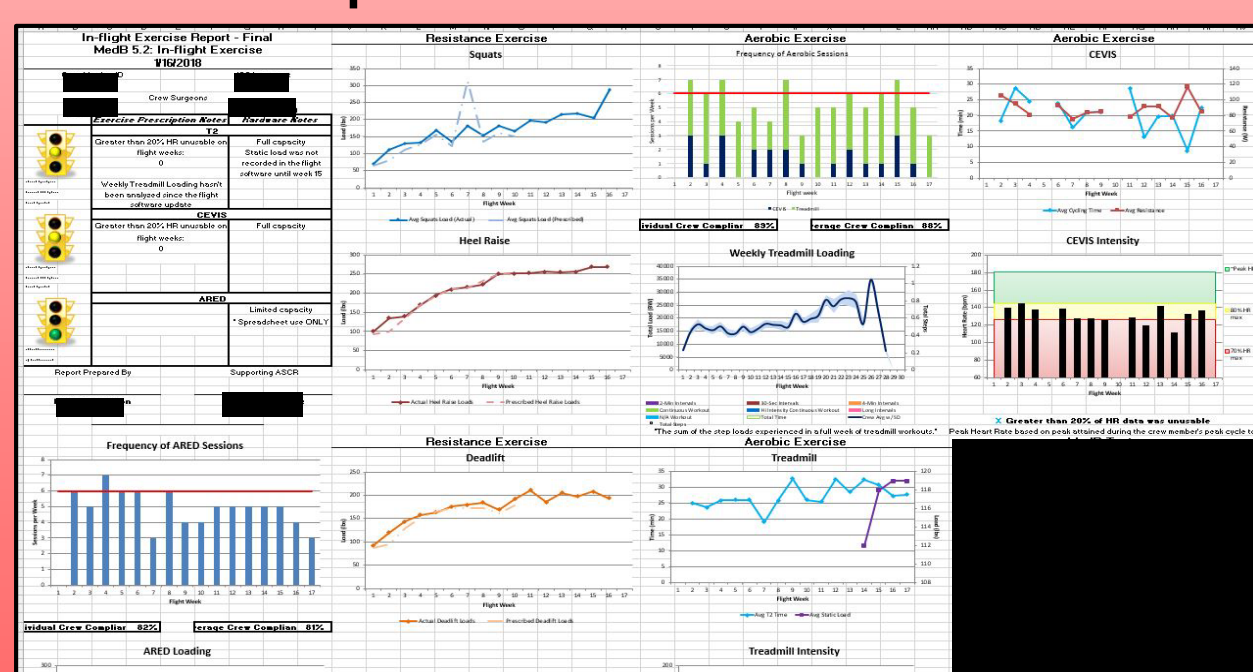
Additional calculations through update queries
15 queries for each crewmember

Cop
&
past



Direct edits puts data at risk

PDI



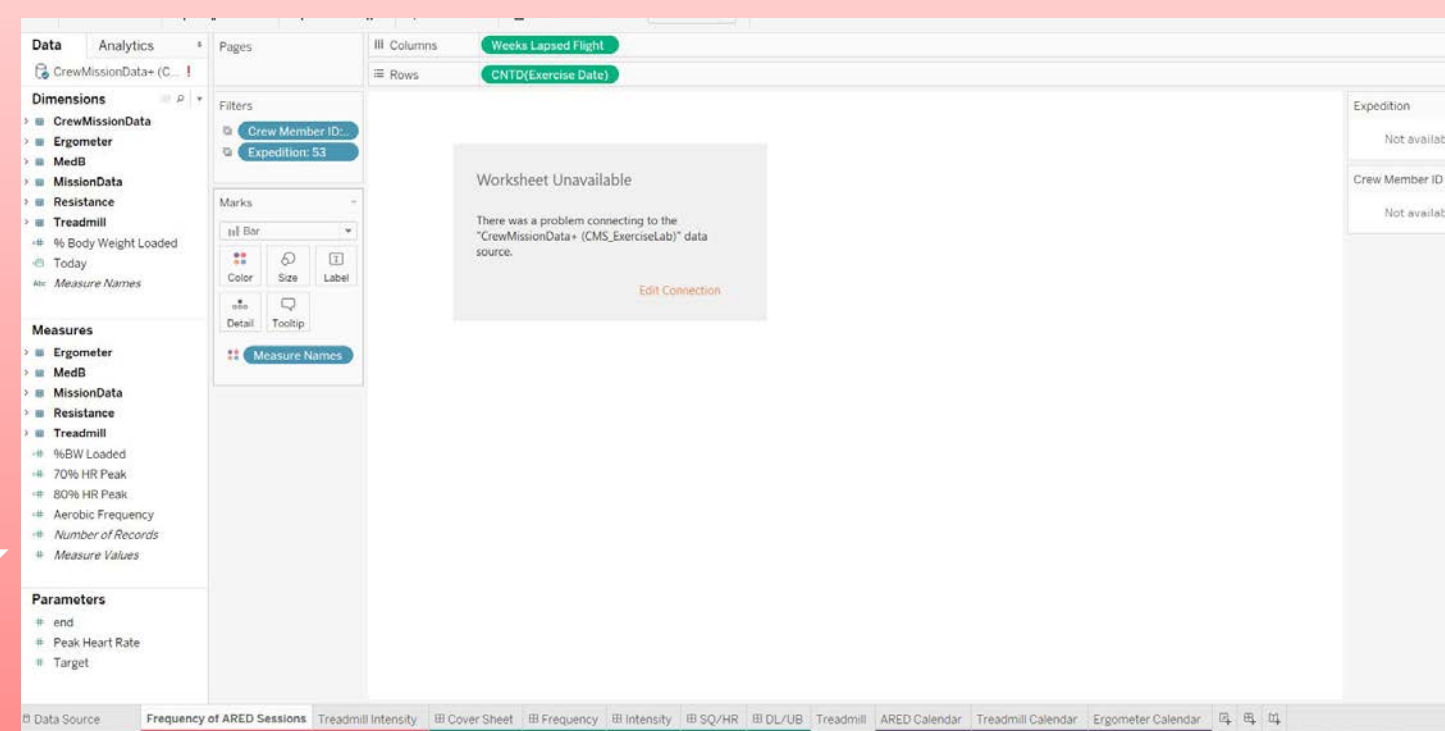
Underlying “raw” data submitted to biostatisticians for crew debriefings

ONE database for all data (Exp 1 – current mission)
Safeguards data from direct edits



Automatic connection with SQL database
Single workbook with filter option to change crewmember
Safeguards data from direct edits

PDI



Signed PDF copy of report submitted for crew surgeon & deputy crew surgeon to review

Underlying “raw” data submitted to biostatisticians for crew debriefings

- Automatic absorption of data files into SQL allows for reporting and analysis within minutes of dropping files

- Real-time data visualization for users
- Dashboards individually built for specific users

Commercial tools were evaluated to help aggregate and visualize data from the SQL database. The Tableau software provides manageable interface, which has improved the laboratory's output time of crew reports by 67%. Expansion of the SQL database, to be inclusive of additional medical requirement metrics, addition of 'app-like' tools for mobile visualization, and collaborative use (e.g., operational support teams, research groups, and International Partners) of the data system, is currently being explored.